

PRESENT SITUATION AND PROBLEMS IN EASTERN WAR

Warring Forces Glare at Each Other Across the Banks of the Yalu—Korea Will Be the Scene of Great Engagements.

WHILE the public is breathlessly awaiting news of the landing of Japanese forces at Niuchwang, or of an attack upon Vladivostok by the Japanese navy, strategists—American army and naval officers who know the art and science of war—are watching the Yalu River and studying the work the Japanese have done that they may not be dislodged from Korea, where they have become so thoroughly entrenched.

The naval victories of Japan at Chemulpo and Port Arthur were glorious, but why don't they fight on land? Why does not Japan strike while the iron is hot, and repeat its sea victories on land? persons ask whose knowledge of war is based only on the accounts of engagements printed in the newspapers from day to day.

Skilled strategists, whose experience in the field enables them to understand the difficulties of occupying and holding a country as rough as Korea, are amazed by the achievements of the Japanese on land, and exclaim: "The world has never seen anything more remarkable than the well-ordered campaign which Japan has waged in Korea." To the casual newspaper reader a few clashes between Cossacks and Japanese outposts at Ping-Yang and the announcement that the Japanese have finally reached the Yalu River and are intrenching themselves there mean little. To the trained military man the arrival of the Japanese at the Yalu indicates a great achievement for Japan. It means the Japanese have gone as far north as they intend to go with a great army, and are at last intrenched where they will eventually meet the enemy.

The Coming Battle Ground.

Rumors of the landing of large forces at Niuchwang and Poesit Bay do not distract the attention of the skilled military man from the northern boundary of Korea, where he realizes the battles must take place. Small campaigns may be carried out in other parts of Manchuria by the Japanese to harass the Russians, but United States army officers are agreed the great engagements between the warring land forces must be near the Korean border. Japan is doubtless endeavoring to give the impression that she is about to inaugurate campaigns in remote parts of Manchuria, and newspapers are publishing such information with the result that there is no positive information that large bodies of Japanese troops have landed outside of Korea. A steady stream of Japanese soldiers has poured into Chemulpo since the brilliant naval victory which made it possible for the Japanese to control the east coast of Korea. Gradually the military strength of Japan has worked toward the Yalu River, where military experts say it will stop.

Niuchwang, Port Arthur, and Vladivostok are vulnerable points, and it is believed by strategists that these cities will be harassed by the Japanese navy, which is destined to run affairs on sea at will, at least until the Russians are reinforced by vessels from European waters. Even land expeditions may be attempted through those ports, compared with the movements along the Yalu River.

What Japan Is Fighting For.

Both political and strategic conditions make it certain that the great battles of the war will be fought near the Yalu. Korea is what Japan is fighting for. The peninsula has been fortified by the Japanese, and will be defended by them. Their cause will be strengthened by limiting their activity chiefly to the territory they claim. Then from a strategic point of view it would be ruinous for Japan to wander away from Korea, its base of supplies, and pursue the Russians far into a country Japan cannot hope to control.

Even in the event of a Japanese victory in the present war it is unlikely that Japan can gain possession of Manchuria. Trade concessions of great value to the Japanese may be forced from the Russians, but Japan can scarcely hope to acquire more territory than the Korean peninsula.

Prepared for Long Campaign.

In direct water communication with its base of supplies, the Japanese army along the Yalu River is prepared to endure a long campaign in that region, while the Russians along the Yalu cannot receive supplies by water, and have inadequate facilities for transporting provisions overland through the rough country separating them from their railroad. Consequently a waiting game on the Yalu will be less disastrous to the Japanese than to the Russians.

Russia probably has not dared to hope that it can gain control of Korea. This would be as much out of the question as the control of Manchuria by Japan. Still the two nations guard the banks of the Yalu zealously, each fearing that the other will get the larger slice of the spoils.

While the skilled strategist emphasizes the importance of the situation in Korea, he does not detract in the least from the movements of land and sea forces along the Manchurian coast and in the interior of Manchuria. Campaigns conducted away from the great center of action in this war will undoubtedly be of greater magnitude than the chief movements in many recent wars, and a study of the entire country within the war zone is interesting.

THE THEATER OF WAR.

Extent and Character of the Territory and Waters Involved in the Conflict—Advantageous Position of Russia and Obstacles Which Japan Would Meet in an Invasion of Manchuria.

The theater of a war comprises all the territory and waters upon which the combatants may assault each other, and must not be confounded with the theater of operations, which is a defined

space within the theater of war which an army occupying may desire to invade or which it may be necessary to defend. The theater of war in the Far East, therefore, comprises all of Manchuria, that section of Siberia in which Vladivostok is situated, Mongolia to the extent necessary to safeguard the Siberian Railroad, Korea and Japan and the Liao-Tung Gulf, the Gulf of Korea, the Yellow Sea, Korea Straits, the Sea of Japan, and such parts of the Pacific Ocean as are adjacent to Japan. The field of operations, however, may be restricted to the district lying between Mongolia, China proper and the Liao-Tung Gulf on the west, a line drawn through Harbin east and west on the north, the Sea of Japan on the east, and the Liao-Tung Gulf, the Yellow Sea, the Sea of Japan, and a line drawn east and west through Seoul in central Korea on the south.

The Topography of the Country.

The topography of the territory over which a war is to be fought determines in advance the general lines of strategy to be followed by the contending armies. If the country is mountainous with few well-defined roads, as is the case with Manchuria, the army acting on the defensive has enormous advantages, while the aggressor must overcome by force of numbers or greater skill in the art of war.

The Russians, firmly seated in Manchuria with a constantly increasing army, knowing the only practicable line of advance for the Japanese, are in a position to offer the strongest kind of opposition to the enemy. Any invasion of Manchuria, except by way of Niuchwang and the Liao and Sungari valleys must be over wide ranges of mountains, which offer a natural protection for the Russian flanks. Eight mountain ranges run northeast and southwest through eastern Manchuria. The mountains, rising abruptly from the Sea of Japan, offer a barrier nearly 300 miles wide between the coast and the Port Arthur branch of the Chinese Eastern Railroad.

Only two roads in the least suitable for military movements pierce these ranges. One is on the north; this starts from Poesit Bay and runs northwest through Niuchwang to Niungta, through the valley of the Gai-Khe, and thence in a generally southwesterly direction, through Kirin to Mukden. The road on the south begins at Pusan, Korea, and runs in a generally northwesterly direction through Pihang, Seoul, and Anju, Chong-Ju, Yongampo, to Wiju, where it crosses the Yalu and divides into three roads, one running southwestward, across the lowlands and streams to Port Arthur, 170 miles away, another going westward across low ranges and streams to Niuchwang, 130 miles, and the main road, which runs northwest by way of mountain gorges through Fung-Wang-Chang, to Liao-yang, where it joins the road running north through the valley of the Liao, to Mukden and Harbin. It is along the Korean section of this road that the Japanese have advanced to the Yalu.

On the extreme west there is another avenue of approach on the Russian line of operation to which sufficient attention has not been drawn. This is by way of Chin-Wang-Tao, along the railroad running through the plain west of the Liao River to Shu-Min-Tung, which is due west of Mukden, only comparatively speaking, a few miles. This route should be fixed in the mind as a possible line of Japanese advance. Another road of an indifferent character drops south from Kirin, along the upper Sungari, and strikes the northern apex of the Yalu at Maofurchan. There is a trail also from Kiju, on the eastern coast of Korea, over the mountains and through Maofurchan, by which it would be possible to reach Mukden. The most practicable route, however, for the Japanese is by way of Harbin, the objective, is by way of Niuchwang and up the valleys of the Liao and Sungari. Any effort on the center or left flank of the Russian positions must be over mountain ranges.

WHERE JAPAN MUST ENTER

The Line of the Yalu—Port Arthur and Niuchwang the Key to the Liao Valley.

On the southeast of the theater of operations is the mountainous district of northern Korea, with the Yalu offering a natural line of defense for Russia. What use she will make of it probably will be known in a few weeks, as the Japanese advance now are on the Korean bank of its lower reaches. Near its mouth the Yalu broadens, and like-like expansion is about twenty-five miles in length, and from three to four miles in width. The tides are heavy, raising and lowering the level of the large basin by twenty feet at every flow and ebb. Sea-going junks ply up and down for thirty miles, beyond which point the river is navigable by smaller boats for about 120 miles. A little above the widening of the lower Yalu begin the dense forests that line both banks of the river, most of the way to its sources, making the upper Yalu somewhat difficult for large military operations. Several writers have described this forest as almost impenetrable on account of the dense undergrowth. No cart roads extend to the river, and only paths lead down to its banks.

Farther to the west, on the south, is the Gulf of Korea, the Liao-Tung peninsula with the Port Arthur strait, and at its tip, Yin-kow, the port of Niuchwang, and Niuchwang itself.

Niuchwang the Key to Liao Valley.

Yin-kow, at the mouth of the Liao River, is the port of Niuchwang, which is about thirty miles distant up the river. Yin-kow, which is connected by rail with the Port Arthur branch of the Siberian Railroad, is the key to the Liao valley. The possession of Yin-kow is the key to the Liao valley, for their fleet an excellent anchorage during six months in the year, and an additional coaling station. Its possession by the Japanese would deprive the Russians of these advantages and would secure to the Japanese a base of operations within a day's march of the Port Arthur branch of the Siberian Railroad.



WHERE THE FATE OF THE EAST WILL BE DECIDED.
The theater of the Russo-Japanese war on land and sea, showing the field of operations of the contending forces.

and only 150 miles from Mukden. It would force the Port Arthur garrison on its defense and cause the isolation of that place. The country north and south of Niuchwang is flat and open. There is a very slight grade on the Chinese Eastern Railroad south of Mukden. Moreover, that part of Manchuria bordering on the Liao-Tung Gulf is cut up by dikes, and tidal creeks and swamps abound. It is, therefore, unsuitable to the operations of cavalry. If a Japanese army were to attempt to fight its way across the Yalu and through Fung-Wang-Chang to Mukden or Liao-yang, on the railway, it would have to drive the Russians before it out of successive lines of intrenchment in a mountainous country easily defended. Operating in a level country like that about Niuchwang would be a very different matter, and the railway would be close at hand, once a landing had been made. The railway cut and the landing place held, reinforcements could be poured into Manchuria. A point of great military value south of Liao-yang and just east of Niuchwang is Hatching, a castle town, surrounded by massive walls. Near by are commanding heights, invaluable for either defense or attack.

Stronghold of Port Arthur.

Port Arthur has been described in detail so often that it will be sufficient to say that it is one of the most strongly fortified ports in the world. Indeed, it has been held by some observers to be overfortified. The entrance to the harbor is narrow, and is flanked by commanding heights, upon which are forts armed with the heaviest guns. A horseshoe-shaped chain of hills encloses the harbor, with only one break, where the entrance is guarded by two eminences are crowned with fortifications, which dominate not only the harbor but the surrounding hills. The Japanese have found one place where from behind the Liaoshan promontory they can throw shells into the harbor and city with signal effect. These heights there have failed of that purpose, although undoubtedly they have still farther narrowed the channel by their obstructions.

Spring Flood an Obstacle.

Twice a year all Manchuria, the Liao-tung peninsula excepted, experiences two great floods—when the ice and snow melt during this month, and during June the monsoons come. This region has only melted floods, augmented by heavy rainstorms, and after that it shrivels and bakes. Wells and most of the streams, except the Liao, dry up during the hot summer from April to September, when the heavy frost comes suddenly, and winter is ushered in with a vengeance. These floods play havoc with the highways and the bridges, connecting the towns, and they make well-nigh impossible the maintenance of even a trail over the Chang-pai-shan Mountains, which guard Manchuria from the Korean sea. A Japanese line of invasion starting from the northeastern Korean boundary near the upper reaches of the Yalu, or from Poesit Bay, with the intention of penetrating to Kirin, on the eastern edge of the southern plain, would have a difficult path over two hundred miles or more of rugged mountain country. The mountains in this part of Manchuria attain an elevation varying from 5,000 to 8,000 feet. An army pushing its way up the Liao-tung peninsula would also have its troubles. The spring floods augment the mountain streams to rivers, which litter the narrow streams with mountain debris that is never removed.

Some Idea of Distances.

Some idea of distances in the theater of operations may be gathered from the following figures: From Port Arthur to Niuchwang is 175 miles; from Port Arthur to Harbin is 430 miles; from Harbin to Vladivostok is 350 miles; from Chemulpo Bay to Ping-yang is 150 miles; from Ping-yang to the Yalu River is, as the road goes, another 150 miles. From the mouth of the Yalu River to Mukden is still another 150 miles; from Mukden to Harbin is 150 miles; from Harbin to the Korean Gulf to Vladivostok is 60 miles. Poesit Bay, from which the only feasible road leads over the mountain into the Sungari valley, is about seventy miles southwest of Vladivostok. From Poesit Bay along the only feasible road to Niuchwang, near which it would be possible to intercept the Trans-Siberian Railroad, the distance is nearly 200 miles. From Niungta to Kirin, along the road, is another 200 miles, at the end of which you are still seventy miles from the railroad in a straight line.

VLADIVOSTOK A PROBLEM.

Impregnable From the Sea, and Capable of Withstanding Almost Any Attack on the Land Side.

On the east of the theater of operations lies that part of Siberia in which Vladivostok is situated, the Sea of Japan and northeastern Korea. Vladivostok, of course, is the chief military depot. The city is situated at the southern end of the Muravei-Amurski peninsula, which projects from the mainland on a southwesterly line to the Bay of Peter the Great. This peninsula, which varies from seven to ten miles in width, is hilly and rough of surface. Just south of the end of the peninsula, and separated from it by a channel varying from a breadth of half a mile at the west end to a mile at the east, lies Kozakievitch Island, as rugged and hilly as the peninsula.

The inner harbor is an arm of the sea extending from this cross-channel into the end of the peninsula. Of this harbor, the inner harbor then varies in uniform width throughout its whole curving course, this inner harbor leaves only a narrow tongue of hilly land on the western side of the main peninsula. This narrow tongue being the Shkoto peninsula. Leading northeast for about 200 miles, the inner harbor then turns to the right, not quite at right angles with its first direction, forming a deep, safe anchorage about three miles long and three-quarters of a mile wide; this is the famous "Golden Horn" of the Pacific. The inner harbor is surrounded on every side by high hills, and the very crest of the peninsula, the Shkoto peninsula, is defended by at least three forts along its summit, and the channel to the west between its point and Kozakievitch Island is narrow and dangerous because of reefs and sands. The island to the south of the inner harbor, by a long narrow arm of water entering from the northwestern coast, and reaching nearly over to the eastern coast of the island. The hilly peninsula which is thus formed of the northern-eastern part of the island ends at its western end in a small point, called Poot-Lavov, which is just across the narrow channel from the end of the Shkoto peninsula, and is provided with forts and heavy guns.

The Port Well Defended.

Across the Horn, to the south, are abrupt, thickly wooded hills, the only buildings upon them being magazines and storage places for explosives of one kind and another. The railway enters the town at its west end, running a few miles to the inner shore of the Shkoto peninsula. This peninsula is defended by at least three forts along its summit, and the channel to the west between its point and Kozakievitch Island is narrow and dangerous because of reefs and sands. The island to the south of the inner harbor, by a long narrow arm of water entering from the northwestern coast, and reaching nearly over to the eastern coast of the island. The hilly peninsula which is thus formed of the northern-eastern part of the island ends at its western end in a small point, called Poot-Lavov, which is just across the narrow channel from the end of the Shkoto peninsula, and is provided with forts and heavy guns.

The cross-channel, called the Eastern Bosphorus Strait, extends from this narrow western entrance in a southeasterly line between this hilly coast of Kozakievitch Island and the equally hilly and much indented coast of the main peninsula end. Both of these hilly shores bear several forts. The eastern line of the main peninsula is prolonged to the southwest in a high spit of land, fringed which from Kozakievitch Island comes a similar spit extending toward the northeast. In the middle of the narrow Bosphorus Channel between these spits is Skrupinsky Island, heavily fortified. The passage into the Golden Horn, therefore, is long, is easily approachable only through the eastern channel, and is so set about with hills that a hostile fleet could hardly do enough damage by a bombardment to assure itself a safe entrance; the east and west entrances are presumably protected with mines. The armament of the forts is not definitely known outside of Russian official circles. There have been in the forts a considerable number of heavy Krupp guns, but it is reported that some of these, as well as other sorts of the armament, have been taken to Port Arthur within a few months past.

Impregnable From the Sea.

From the sea Vladivostok is now practically impregnable. What has been done against the possible attacks of the Japanese is well enough indicated by what was actually done some years ago, when there was a Russo-British war scare over the Indian frontier. At that time the lights at the east and west entrances were put out; the western entrance was wholly closed with mines, and the eastern entrance was underlaid

all except a fifty-yard space, with both electric and explosive mines. The town could be reached by bombardment ships at that time, as it was recently by the Japanese fleet, but this, save for the damage it might or may have done to any Russian ships anchored in the harbor, was not of any value toward capturing the town. It is likely that Japanese shells might reach the new barracks at the west end of the Golden Horn and destroy them. But the forts, though they might suffer severely from fire in some directions, cannot be put out of action.

The Poesit Bay Route.

About seventy miles southward of Vladivostok is Poesit Bay, which opens out of a gulf between mountain ranges north of Tumen River. It is a Russian military station, and some slight attempt has been made to defend the bay by guns and mines. It is a place of the first strategic importance, as it is the starting point of the only practicable road from the east over the mountains toward the Vladivostok-Harbin Railroad, or toward Harbin, Kirin, or Mukden. An invasion of Manchuria by this route for the purpose of taking Harbin should satisfy the maxim of war that "other things being equal the nearest road to the objective is the best." From Poesit Bay it would be impossible to send troops northwest, along the coast, to the mouth of the Amur, and thence to the junction of the Vladivostok-Harbin Railroad at Modashi, which could cut off Vladivostok from direct railroad connection with Harbin, or a force could be sent north from this point to break the line in the immediate rear of Vladivostok, and between the two points of attack the Harbin Railroad would be cut. The Harbin Railroad by the branch running north to Kharbarovsk, which latter road furnishes the summer route, in connection with the Amur and Sungari Rivers, from Harbin to Vladivostok. Along the Poesit Bay route there are forts at Hun-Chung, and Sankin, as well as forts and arsenals and powder mills at Kirin, which the Russians have seized and are operating. Hun-Chung is on the telegraphic system. The city of Kirin occupies two miles on the left bank of the Sungari, in a bend where the river flows east to west on its way to the junction of the Amur. It is known as the "Dockyard," because it is the chief boat-building center on the Sungari.

QUESTION OF TRANSPORT.

Not So Difficult for the Russians as Generally Believed.

The railway system of Manchuria is like a great capital T on the map of the country. The flat top part crosses the province from the Siberian Railway on the left to Vladivostok on the right, and from the middle drops the upright stalk, 600-odd miles long, which leads to Port Arthur. At the middle point, in the very center of Manchuria, stands Harbin. From Harbin to the sea are two lines of railway, both of them practically level all the way. The 600-odd miles of line to Port Arthur has no gradient of more than 1 in 10, and the 150 miles to Vladivostok have no point steeper than 1 in 75. It is a military strategic railway, guarded as no other railway in the world is guarded, with blockhouses every one, two, three, or four miles, as the case demands, with garrisons at every important point. Every vulnerable point is guarded; every bridge is doubly guarded.

The great difficulty with the Trans-Siberian Railway is its poor construction. West of Manchuria, it is provided with 30-pound rails, which are only one-fourth as heavy as the rails used on the best railways in the United States. The road is a single track, but it is said to have sufficient sidings to make it possible for trains to pass without great inconvenience. It will be in the matter of field transport for large bodies of troops in motion away from the railroads that Russia will be weak. Under her system an additional 100,000 men is supposed to have 2,000 wagons. In actual service each Russian soldier carries two day's rations. The regimental trains carry rations for two days more, and the divisional trains for from two to four days additional. In a land where it is difficult to live of the country, where roads are bad at any time, and which during this season of the year, owing to the floods, are well-nigh impassable to the heavy military wagons, it is pretty safe to predict that the system will be strained to the breaking point. In the past, under more favorable conditions, Russia's commissariat has failed

Impregnable Vladivostok Bids Fair to Baffle Japanese Strategists, Shrewd as They Have Shown Themselves to Be.

miserably. It must be remembered, however, that the Russian soldier is not accustomed to the luxurious fare of the American soldier, for instance, or even of the Japanese, and he still would be efficient under conditions that would be a scandal in our service. The Cossacks escape up a living hell, where there would starve. They are, in fact, the most accomplished foragers in the world, and as they usually have spare horses, sometimes two for each man, they are likely to be the most mobile and best fed troops in the field of operations. The Chinese farmers will not be likely to cause the Russians any considerable anxiety in the territory which they now occupy. Too many of them have been made rich, according to their lights, by the Russian occupation, and the whites have done everything to make the agriculturists understand that they are friends and their interests identical.

Japanese Supply System Good.

The Japanese system of transport as a whole is much superior to that of the Russians. Starting from Japan all supplies are done up in packages covered in matting, of a size that can be easily lifted by two men. These packages are put on steamers, then transferred to smaller tugs, of which the Japanese have plenty, then from the tugs to the small boats. From the shore, on which, owing to their light draft, steamers and small boats they can land with considerable facility at many points, their supplies are transported in light carts, most adaptable to the country they will have to fight in. These vehicles are in strong contrast to the heavy Russian cart. Again, the Russians have no corps of transport men other than the Cossacks, whereas the Japanese troops have only to fight, for they bring their own corps of coolies.

During their war with China they showed a remarkable ability to create their transport and commissariat apparently out of nothing as they went along. They did not trouble much about baggage trains; they had them, to be sure, well supplied and well ordered, but the troops moved so quickly that they were out of touch with their wagons half the time. They traveled in the lightest possible order and picked up any old native carts or mules or coolies they chanced to meet, making them serve the necessities of the moment, and then letting them go and getting other written orders. The only drawback of this system was that as the campaign advanced the armies became clogged by large numbers of coolies and other camp followers, who created a great deal of trouble. During the advance to the relief of the besieged legations at Peking the Japanese commissariat was, by common agreement of the foreign officers, better than that of any of the European troops, and the Japanese soldiers showed a genius for foraging and accommodating their appetites to the food available in the country. In the present campaign the Mikado's fighting man is carrying a great deal more food with him than his Russian adversary. Against the latter's two cooked rations of rice in addition to six emergency rations. These are contained in an aluminum mess pan, and as the rice has been boiled and dried in the sun, the entire weight is trifling. It is commonly supposed that the Japanese soldier lives entirely on rice and dried fish, but such is not the fact. He can live, and fight well, on that sparse diet, if necessary, but he gives meat and other sustenance, whenever practicable, as well as beer or sake.

RUSSIA CAN FEED ARMY.

Not Wholly Dependent Upon Railroad West of Harbin—Rich Agricultural Country to Draw From.

Frederick said that an army is a monster that crawls on its belly, meaning, of course, that soldiers must eat like other people. To supply an army in the field with food, especially where the base is far from the field of operations, is a difficult task and one that requires great forethought and energy. Much has been written about Russia's inability to sustain a great army in the field. The experts have argued almost without exception that the single-track railroad from the west, besides providing for the mobilization of the army, must carry the food necessary for man and beast in the course of the campaign. This of course is ridiculous. The great plain region of the Amur and Sungari valleys of Manchuria, 100 miles wide by 500 miles long, has been the storehouse for hundreds of miles around. Its products have fed populations in the littoral provinces of Siberia on the east as far away as the Liao-Tung peninsula on the south; in Mongolia on the west, and in the Trans-Baikal country on the west and north. Every traveler through the plains country is struck with the wonder of fertility of the soil. Winter lasts from five to six months. There is little snow, owing to the dry northerly winds, but the ice attains a thickness of three and four feet. With the breaking of winter in April, summer begins immediately, corn is well out of the ground by the last of the month, crops are up in all sides under the beneficent influence of the monsoons, which begin in June, and force the grasses, for example, to the height of two or three feet. These grasses make excellent forage.

STRATEGY OF THE WAR.

An Outline Based on the Character of the Theater of War and Comparative Strength of the Combatants.

The war in the Far East may be called one of defense on the part of Russia, and of offense on the part of Japan. Owing to the configuration of the country, Manchuria is open to invasion only along certain lines. These, as already pointed out, are: (1) By way of Poesit Bay on the east, (2) by way of the Sou-

Peking road from Korea on the south-east, (3) from some point near Taku-shan, on the south, (4) from Nuchang, or (5) Chin-Wang-Tao on the southwest. The partial paralysis of Russian sea power at the present moment relegates Port Arthur to the position of a dead factor, to be considered of the first importance, and that some fighting when Russia starts a fleet from European waters capable of swinging the balance of naval strength in the Far East in her favor. Then Japan must take the stronghold and destroy the remainder of the Russian fleet at any cost, so as to leave her own fleet free to meet the coming foe. The Vladivostok squadron also should be taken care of in this eventuality, to prevent its junction with the western fleet.

Enough stress has not been laid by military experts commenting on the war on the great advantage according to Russia from the fact that some fighting on the defensive. The modern long-range, rapid-fire rifle and field piece have made frontal attacks more than ever to be avoided. Movements calculated to turn the enemy out of his position by threatening his lines of operation and communication have become more and more resorted to. The country through which Japan must fight her way, if properly defended, will make this maneuvering most difficult.

At the present moment Russia has available for field operations in Manchuria approximately 175,000 men, exclusive of the garrison at Port Arthur and Vladivostok.

According to the best information, Japan has 260,000 troops "in motion," that is, in Korea or in transports, with 60,000 more in garrisons or at military depots, exclusive of 150,000 men, which have not been called to the colors.

THE PROBABLE OUTCOME.

Japan Likely to Retain Korea, While Russia Will Continue to Hold the Railroad to Port Arthur.

Suppose the Japanese carried the first line of Russian defense, took Port Arthur and Vladivostok, and forced Kuropatkin back to Harbin—a herculean task. Japan would have to have an army of approximately 300,000 men to take that base. And then the Czar's armies would only retire to form a new base west of Harbin, where the concentration of troops could be continued. An advance on Harbin would be a military risk requiring a Japanese Napoleon who would have to bear in mind the retreat from Moscow.

The presence of a victorious Japanese army in Harbin would not force Russia to abandon the contest. The annihilation of present Russian armies would settle nothing. Back of Harbin are other bases from which new Russian armies would advance next year or the year after, or whenever Russia was ready. Japan could not in the end hold the territory conquered. She would be compelled to eventually retire with a loss of prestige, and nothing gained. So unless the first important battles shall show that the Japanese are immensely superior to the Russians in strategy, tactics, and fighting qualities, it seems likely that they will have to be content with something less than Harbin. If they can possess themselves temporarily of Port Arthur and Vladivostok, and hold southern Manchuria say on a line from Liao-yang to the Yalu, they will have achieved a great success. Port Arthur they could hold during hostilities, once it came into their hands, but they would be unable to hold the "virtual mastery of the sea. Vladivostok most likely would eventually be retaken by Russia, though Japan might neutralize its military value by occupying and fortifying the adjacent islands.

On the other hand, should Russia succeed in rolling the invading Japanese back across the Yalu she could scarcely hope to drive them out of Korea so long as Japan has the freedom of the seas. So, if the reasoning has been correct, Japan cannot conquer Russia and Russia cannot conquer Japan. The final outcome of the struggle therefore may be in the nature of a draw, with the advantage in favor of Japan, inasmuch as she probably will maintain her hold on Korea.

RUSSIA'S NAVAL LOSSES.

Five Battleships, Six Cruisers, and Five Gunboats or Torpedo Craft Sunk or Disabled.

BATTLESIPS.	Tonnage.
Retik—Torpedoed and beached at Port Arthur, Feb. 8. Repaired and used as a fort.	12,700
Caravel—Torpedoed and beached at Port Arthur, Feb. 8. Repaired.	13,110
Pallada—Disabled by Japanese at Port Arthur; hole below water line; Feb. 9.	10,200
Petropavlovsk—Blown up by mine or torpedoed, at Port Arthur, April 13.	10,900
Pobeda—Damaged by mine or torpedo at Port Arthur, April 13.	12,674
CRUISERS.	
Boyarin—Disabled by Japanese at Port Arthur, Feb. 9. Sunk by mine on Feb. 11; 197 lives lost.	8,300
Pallada—Torpedoed at Port Arthur and beached, Feb. 8. Repaired.	6,580
Novik—Disabled by Japanese at Port Arthur; hole below water line; Feb. 9. Repaired.	3,200
Askold—Disabled by Japanese at Port Arthur; hole below water line; Feb. 9. Repaired.	6,100
Drang—Disabled by Japanese at Port Arthur; hole below water line; Feb. 9. Repaired.	6,530
Varyag—Destroyed by Japanese at Chemulpo, Feb. 17; scores of lives lost.	6,500
TORPEDO CRAFT AND GUNBOATS.	
Korietz—Destroyed by Japanese at Chemulpo, Feb. 9.	
Manchu—Said to have been seized by Japanese at Nagasaki, Feb. 9.	
Sow—Torpedo boat, sunk by Russian mine, March 20.	
Venezel—Torpedo boat ship, blown up by Russian mine, Feb. 17; 97 lives lost.	
Bostrainski—Torpedo destroyer, sunk by Japanese, April 13.	

There is no knowledge that the Japanese have lost a ship of any kind. The number of men killed in their different assaults on Port Arthur and in the Chemulpo fight never has been stated.